Health Status and the Allocation of Time

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Abstract

We consider the relationship between health and time allocation. Better health is associated with more time allocated towards production on the market and at home, but less consumption of leisure. This suggests that health exerts large effects on market productivity, but larger effects on non-market productivity. These responses are higher for single people than for married people, perhaps reflecting a lack of market substitutes for the time of married people.

Keywords: Labor Supply, Time Allocation, Health, Home Production

JEL Codes: I1, J2

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1 Introduction

Despite recent advances investigating the economic consequences of health status, researchers know surprisingly little about how health impacts time allocation and, particularly, home production. This is an important subject as time use is a critical, yet understudied, component of welfare. In this paper, we investigate this topic and aim not only to better understand the economic consequences of sickness and health but also the appropriate and/or feasible ways of modeling health in structural models of health behavior. Indeed, in the canonical model of health investment of Grossman (1972), time allocation is *the* primary mechanism through which health impacts behaviors.

While economists have yet to investigate the nexus of health and time use, they have long acknowledged that health is a critical determinant of many economic behaviors. For one, it has long been recognized that disease or disability can impede a person's capacity to work. Investigations into this theme have been made by Bound (1991), Rust and Phelan (1997), and French (2005) who looked into health and retirement behavior; Coile (2004) and Wu (2003) who considered the effects of

own health status on spousal labor supply; and Smith (1999) who considered the problem more generally in a survey piece on health and socioeconomic status. Recently, the reach of health status has extended beyond labor supply, particularly to the issues of savings and portfolio choice. For example, Palumbo (2003) investigated the extent to which uncertain medical expenditures may induce agents to save more as a precaution against future medical costs and Rosen and Wu (2004) looked at the potential for poor health to affect people's subjective life expectancies and, thus, create incentives to hold less risky portfolios.

In this paper, we aim to elucidate how health impacts time allocation. This happens through two channels. First, health affects market efficiency. If healthier people are more productive on the market, then they will receive higher remuneration *ceterus paribus* and, thus, work more through a standard substitution effect. Second, health impacts non-market efficiency. If healthier people are better at carrying out household duties such as cooking, cleaning, or home improvements, then the costs of producing these goods at home will be lower, all else equal. Accordingly, healthier people will devote more time to home production. Depending on which effect dominates, better health may have a positive or negative impact on time allocated to home production.

Understanding how health relates to time allocation also has important impli-

cations for the way in which health status is incorporated into structural models of life-cycle behavior, particularly, models of health investment. As mentioned above, time allocation is the primary way through which health enters the Grossman model. In it, there is a theoretical construct which is "time lost due to illness or injury." This construct which we call "sick time" is a black hole that encroaches upon time that can be allocated to productive or pleasurable activities but offers no utility value in and of itself. It is this emphasis on sick time and time allocation that separates Grossman's model of health investment from models of human capital investment, first discussed in Becker (1964) and Ben-Porath (1967). In the former, health affects the stock of time, but does not affect market or non-market efficiency. In the latter, the opposite is true.

Recently, health has also gained prominence in structural models of life-cycle behavior. However, in most cases (*e.g.* Palumbo (2003); Rust and Phelan (1997); French (2005); de Nardi et al. (2010)), health is treated as an exogenous state variable, although Yogo (2009) is a notable exception. As this literature develops, structural models with endogenous health accumulation or models of health investment should become more common. As such, researchers will have to confront two questions. First, does it matter if health enters the model as a form of health or human capital? Particularly, does this alter the age-profiles of health, medical and

non-medical consumption, and labor supply? Grossman's analysis suggests that it does. Particularly, in human capital models, the purpose of medical consumption is to maintain high wages. This makes it difficult for these models to explain why medical consumption is so high among the frail and elderly who engage in little market or home production. Indeed, one of the key results in Grossman's model is that it can deliver a declining age-profile for health and an increasing profile for medical consumption. Second, if the treatment of health status does indeed matter, is it possible to credibly estimate a model of health investment with sick time in the spirit of Grossman (1972) using existing data sources on time use such as the American Time Use Survey?

In this paper, we quantify the effects of health status on time allocation using two data sources: the American Time Use Survey and the Health and Retirement Study. We ask three questions. First, as a matter of data description, how does time allocation vary with health status and age? Based on this analysis, we make inferences about the effects of health on market and non-market efficiency. Second, what is the relationship between health and market goods that are close substitutes for goods that can be produced at home? Finally, what is sick time?

The balance of this paper is laid out as follows. In the next section, we present a simple model of time allocation. Then, we discuss our data sources. After that,

we present our results. In the final section, we offer some concluding remarks.

2 Health and Productivity: Theory

To fix ideas, we consider the productivity effects of health within the framework of Gronau (1980). An individual derives utility from three goods: a market good (x), a home produced good (h), and leisure (l). Preferences over these goods are given by $u(x,h)+v(l)$. We denote health status by H and allow it to affect market productivity ($w(H)$) and non-market productivity ($A(H)$). Labor is allocated to the market (n) and to the home (m). Goods are produced at home with the technology $A(H)f(m)$. If we normalize the endowment of time to unity, the maximization program becomes

$$\max_{l,m,n} \quad u(w(H)n, A(H)f(m)) + v(l) \text{ st } l+n+m=1. \tag{1}$$

We assume that all production and utility functions are increasing and concave.

If market and home-produced goods are perfectly substitutable as in Gronau, then we can write $u(x,h)=\widetilde{u}(c)$ where $c \equiv x+h$. In this case, time allocated to

home production will be pinned down by the condition

$$A(H) f'(m) = w(H). \tag{2}$$

Differentiating this condition with respect to H yields

$$\frac{\partial m}{\partial H} = \frac{w'(H) - A'(H) f'(m)}{A(H) f''(m)}. \tag{3}$$

which says healthier people will work more (less) at home if health has larger (smaller) impacts on non-market productivity than on market productivity. Once we pin down non-market work, we can obtain market work through the condition

$$u'(w(H) n + A(H) f(m)) w(H) = v'(1 - n - m). \tag{4}$$

This is standard and says that the marginal rate of substitution between leisure and goods must equal the wage. Differentiating this condition obtains

$$\frac{\partial n}{\partial H} = \frac{-u''(c) w(H) [w'(H) n + A'(H) f(m) + A(H) f'(m) \frac{\partial m}{\partial H}] - v''(l) \frac{\partial m}{\partial H} - u'(c) w'(H)}{u''(c) w(H)^2 + v''(l)}. \tag{5}$$

This is a more complicated comparative static. The denominator is unambiguously

negative. If $\frac{\partial m}{\partial H} > 0$, then the first and second terms in the numerator are positive, whereas the third term is negative. Accordingly, even if the non-market effects of health status dominate their market effects so that healthier people work more at home, it is still possible to observe that healthier people also work more on the market if the market effects of health are sufficiently strong by themselves. The use of this model is that the comparative statics are ambiguous and, so by investigating the empirical relationship between health and time use, we will be able to make inferences about the effects of health on productivity both at home and on the market.

3 Data Description

3.1 American Time Use Survey

Our primary data source is the American Time Use Survey (ATUS). For the years 2006 to 2008, the ATUS has an Eating and Health Module that contains a question about the respondent's general health status and contains about 37,300 people. About 19,700 are married or cohabiting (9300 male, 10,400 female), and 17,700 are single (7000 male and 10,700 female). These sample sizes are slightly reduced in some of our regressions due to missing data. The ATUS uses a diary to measure time use

in which people list their activities over a 24 hour period. These activities are placed into categories which are then used to construct time use variables. Activities which could not be easily categorized are assigned to unclassified time. We partition total time allocation into ten categories: home work, paid work, sleep, sleeplessness, watching TV, leisure excluding TV watching, exercise, grooming and personal health care, other time, and unclassified time. We describe the activities that constitute each category in Table 1. Descriptive statistics are provided in Table 2. Note that all time use categories sum to 1440 minutes, the total number of minutes in a day. All extracts were created using the ATUS Extract Builder provided by the Maryland Population Research Center and all ATUS data is weighted by the Eating and Health Module weights.

We also use variables for health status, race, education, age, and the presence of children in the household. Descriptive statistics for these are reported in Table 2. Our health variable is a self-reported health status variable (SRHS) in which respondents rate their own health in one of five categories: poor (SRHS = 5), fair (SRHS = 4), good (SRHS = 3), very good (SRHS = 2), or excellent (SRHS = 1). While SRHS is subjective, it has consistently been shown to be highly correlated with morbidity and highly predictive of mortality in the PSID. For the balance of this paper, we define "good health" to be SRHS equal to 1 or 2 and "bad health" to

be SRHS to be equal to 4 or 5.

3.2 Health and Retirement Study

To supplement the analysis, we use the Health and Retirement Study and its biannual Consumption and Activities Mail Survey (CAMS). CAMS is mailed to a sub-sample of HRS participants, and is available for 2001, 2003, 2005, and 2007 and contains information on time use and household spending. There are about 11,200 married or cohabiting people present in these years of the panel, about half of them female; and 2000 singles, 3/4 of which are female. Once again, the sample size is further reduced in our regressions due to missing data in several categories. We also employ time use data in which the respondent reports the total number of hours in a week allocated to an activity. A summary of these activities is provided in Table 1. In addition, we employ data on race, education, age, and the number of children. Summary statistics are presented in Table 3.

Because time diaries were not used in the data collection, the categories do not necessarily sum to 168. We truncated the HRS data to include 97.5 percent of the observations, dropping observations for which total time use was in the top 2.5 percent of the distribution. The mean of total time in HRS is higher than 168 hours because respondents may report double time when they are multitasking (for

example time spent listening to music while cooking may be double-counted). As the time use data are of much higher quality in the ATUS, we consider the results from the ATUS to be superior.

Finally, we note that the sample sizes differ across the time use and consumption regressions for two reasons. First, the time use data is individual level data, whereas the consumption data is household level data. Second, some of the consumption items that we used were not available in 2001, so we restricted the consumption regressions to 2003-2007.

4 Health and Time Use

We now turn to our empirical analysis. Our aim is to provide a careful description of the data and to employ these results to arrive at a better understanding of how health, productivity, and time use are related. We report the results of OLS, tobit, and probit regressions from the ATUS. As robustness checks, we also report feasible GLS linear regressions from the HRS which exploit the panel dimension of these data for efficiency gains. All estimations are conducted separately for married and single people broken down by gender and include dummy variables for good (SRHS equal to one or two) and bad health (SRHS equal to four or five) and a comprehensive set

of control variables which are listed in the footnotes of the tables.

4.1 The Age Profile of Time Use

As a matter of data description, we begin our discussion with the age-profile of time use for single and married people in the ATUS. These are displayed in Figure 1a for single people and Figure 1b for married people. Each figure displays the age-profiles of minutes per day allocated to nine activities: home production, market production, sleep, sleeplessness, TV watching, leisure, grooming and personal health care, and other time uses. To account for noisiness associated with small cell sizes, the profiles are calculated using three year moving averages.

While most of these profiles are unremarkable, we would like to highlight the exercise profile which is flat. If one notes that the implied wage-elasticity of exercise is

$$\sigma_{e,w} = \frac{\sigma_{e,a}}{\sigma_{w,a}}$$

where $\sigma_{e,a}$ and $\sigma_{w,a}$ are the age elasticities of exercise and wages, then this suggests that the wage-elasticity of exercise is small. This is notable since, *a priori*, one would expect an increasing profile since older people have a lower opportunity cost of time which facilitates greater time allocated to the production of health. In fact, this is a

result of the Grossman model under the conditions that the elasticity of demand for health is sufficiently low and the elasticity of substitution between medical care and time in health production is sufficiently high (see footnote 32 of Grossman (1972)). This suggests that medical consumption is the primary input that is used to offset the depreciation of health capital as people age.

4.2 Health and Time Use in the ATUS

We now move on to our regression estimates in Table 4 where we report equation-by-equation OLS estimates of the relationship between time use and health status. These results should be interpreted as a succinct summary of the effects of health on time allocation at both the intensive and extensive margins. In addition to reporting the coefficients on good and bad health, we also report a test that the difference between good and bad health is zero.

For both married and single people, we observe that healthier people allocate more time to both home and market production. Within the context of our model, the former result implies that health has larger effects on non-market productivity than on market productivity (*i.e.* $w'(H) < A'(H) f'(m)$). However, we also observe large positive effects on market production. While this is not a surprising result, it is interesting that healthier people allocate more time to all productive activities at

the expense of a lower consumption of leisure. To generate both of these results, our model implies that the market effects of health must be sufficiently large, although the non-market effects must be larger.

Next, note that the estimates for each health category sum to approximately zero. In fact, if we were to have reported the coefficients from the unclassified time equation they would sum to exactly zero. This is the consequence of an aggregation condition that is obtained by differentiating the time constraint with respect to health status.

In Figure 2, we plot the difference between the coefficients on good and bad health for nine time uses by marital status and gender. First, the figure shows that the responsiveness of time use to health is lower for married people than it is for single people for home work, paid work, sleep, sleeplessness, watching TV, and leisure. Note that because of the aggregation condition that the coefficients across time uses must sum to unity, a higher positive elasticity for some uses should be accompanied by higher negative elasticities for other uses which is precisely what the figure shows. We speculate that the effects of health are lower for married people because there are fewer substitutes for their time than for single people. For example, a single person who falls ill may be able to hire someone to clean their house once a week, but a married person with children may have a harder time hiring someone to dress their children, make them breakfast, and shuttle them to school in the morning. There

also is a weaker pattern in which the effects of health are the lowest for married women. However and notably, the effects of health on home production are higher for married women than for married men, but the reverse is true for paid work.

We now investigate the effects of health on time use at both the intensive and extensive margins for singles in Table 5 and for couples in Table 6. The tables display a nice dichotomy across married and single people. At the intensive margin, the effects of health on home production are larger for singles, but at the extensive margin, they are larger for married people. This second result suggests that the labor supply of mothers and fathers is somewhat lumpy at home. We speculate that married couples supply their labor at home somewhat inelastically unless they are sufficiently disabled in which case they do not work at all.

We conclude with Tables 7 and 8 where we report estimates of tobits and probits using the constituents of the home work variable as dependent variables for singles and married people. In each panel of the table, we report the results for men and women and we arrange the categories by the difference between good and bad health coefficients. If one looks at the top and bottom five activities, some interesting patterns emerge. Looking at single men and women, the five activities with the largest responses almost coincide perfectly with the exception that purchasing vehicle maintenance is in the top five for women, while purchasing professional services is in

the top five for men. So, it appears as if single men and women who are ill tend to neglect their homes inside and out. However, looking at the bottom five activities, one sees a sharp dichotomy. Housework, grocery shopping, travel to household activities and purchasing household services tend to have low responses to health for single men. On the other hand, caring for children and pets tend to be the least elastic for single women.

Looking at married people, one sees a stark division of labor. Married men tend to have high responses for doing home and vehicle maintenance as well as for caring for non-household adults, but low responses for shopping activities and purchasing vehicle repairs. Married women also have high responses for various types of home maintenance and improvement activities, but low responses for caring for pets and non-household adults. It appears as if the burden of caring for aging grandparents may fall upon the wife.

4.3 Health and Time Use in the HRS

In Table 9, we explore the relationship between health and time use in the HRS as a robustness check to our previous estimates. The key result from the ATUS that better health is associated with more time spent in home and market production still holds. In addition, the responses in the home work category are still lower for

married people.

Because these data are not as clean as the ATUS, the accounting does not work as well for the HRS than it does for the ATUS. For example, for single women, the difference between the coefficients on good and bad health is positive for all time uses except for grooming and health and the sum of these differences is far from zero. The only time use category that consistently showed negative effects was grooming and health.

4.4 Market Goods and Time

We report the effects of health on market goods that are closely substitutable for many home produced goods in the same table. We consider household services, yard services, and dining out. For household services and dining out, we consistently see that consumption is higher for healthier people. This is consistent with the model. Because market goods consumption equals the wage times market labor, finding positive effects of health on market labor implies that healthier people must consume more goods on the market, provided that healthier people have higher wages.

Note, however, that this result confounds income and substitution effects. The substitution effect is the effect of health on market goods holding total goods consumption (*i.e.* the total of goods produced at home and consumed on the market)

constant. Because our results suggest that $w'(H) < A'(H) f'(m)$, healthier people should work more at home and less on the market holding total consumption constant. This, in turn, reduces the consumption of market goods. On the other hand, healthier people earn more and this will increase the consumption of market goods. Our results suggest that the income effect dominates.[1]

5 Conclusions

So, how does time allocation vary with health status and age? Better health is associated with more time allocated towards production on the market and at home, but less consumption of leisure. If we interpret this finding within the context of a model of time allocation borrowed from Gronau (1980), this suggests that health exerts large effects on market productivity, but larger effects on non-market productivity. We also find that the time use of married people is less elastic than for single people at the intensive margin, but more elastic at the extensive margin.

[1] Calculating the pure substitution effect would entail estimating the effects of health on market goods consumption and home production holding the total of market and home-produced goods constant. This is somewhat difficult without the aid of a structural model. In one crude exercise which we do not report, we also controlled for income and labor force status to get a better handle on the pure substitution effect; health still had a positive effect on goods consumption. The problem with this exercise is that total income is spent on many goods that are not closely or even remotely substitutable for home-produced goods and, so it is not a strict test of substitution between market and home-produced goods. In future work, we might consider a structural estimation of Gronau's model to address this deficiency of this work.

Our result that healthier people work more at home has a nice concordance with a recent paper by Hamermesh and Lee (2007). They argue that anything that raises efficiency should relax time constraints and, hence the shadow price of time. Consistent with their theoretical predictions, they provide evidence using data from Australia, Germany, and the United States that healthier people report a lower prevalence of time stress holding all else constant. Our result supports theirs since, within the context of Gronau's model, it implies that healthier people are more efficient at home production.

Next, what is the relationship between health and market goods that are close substitutes for goods that can be produced at home? We find that healthier people consume more of these goods. This result is driven by an income effect; healthier people earn more and work more and so consume more. In future work, researchers may want to structurally estimate a model of time allocation to decompose our result into a pure income and substitution effect, although this task is made difficult by the absence of good time use and consumption data in the same data set.

Finally, what is sick time? It is a useful theoretical construct that cleanly separates models of human capital from models of health capital, but, unfortunately, it lacks empirical content. Indeed, time use diaries do not have a separate entry for sick time. Instead, what is separately delineated as sick time in Grossman's model

is classified as some form of leisure in the ATUS. This will create complications for researchers who seek to structurally estimate models of health investment in the future. Without credible measures of time allocated to work on the market and at home, leisure, and sick time, structural estimation of life-cycle models of health investment will be fraught with difficulties. One way for progress to be made on this front would be for future time use surveys to use diaries that measure health status in conjunction with time use.

The primary limitation of this paper is that it is based on observational data and so only reports partial correlations between health and time use. Future work could improve on what we have done by attempting to uncover a credible source of exogenous variation in health status, although we are skeptical that this could be done. Consistent with our speculation, the health economics literature (in our opinion) has yet to accomplish this. Indeed, many excellent papers that have investigated the economic consequences of health status such as Hamermesh and Lee (2007), Coile (2004),Wu (2003), and Rosen and Wu (2004) do not address this endogeneity issue and so are very much in the spirit of this study. That said, we contend that a careful descriptive analysis of interesting data sources in conjunction with a simple model can produce interesting insights into the economic behavior of households.

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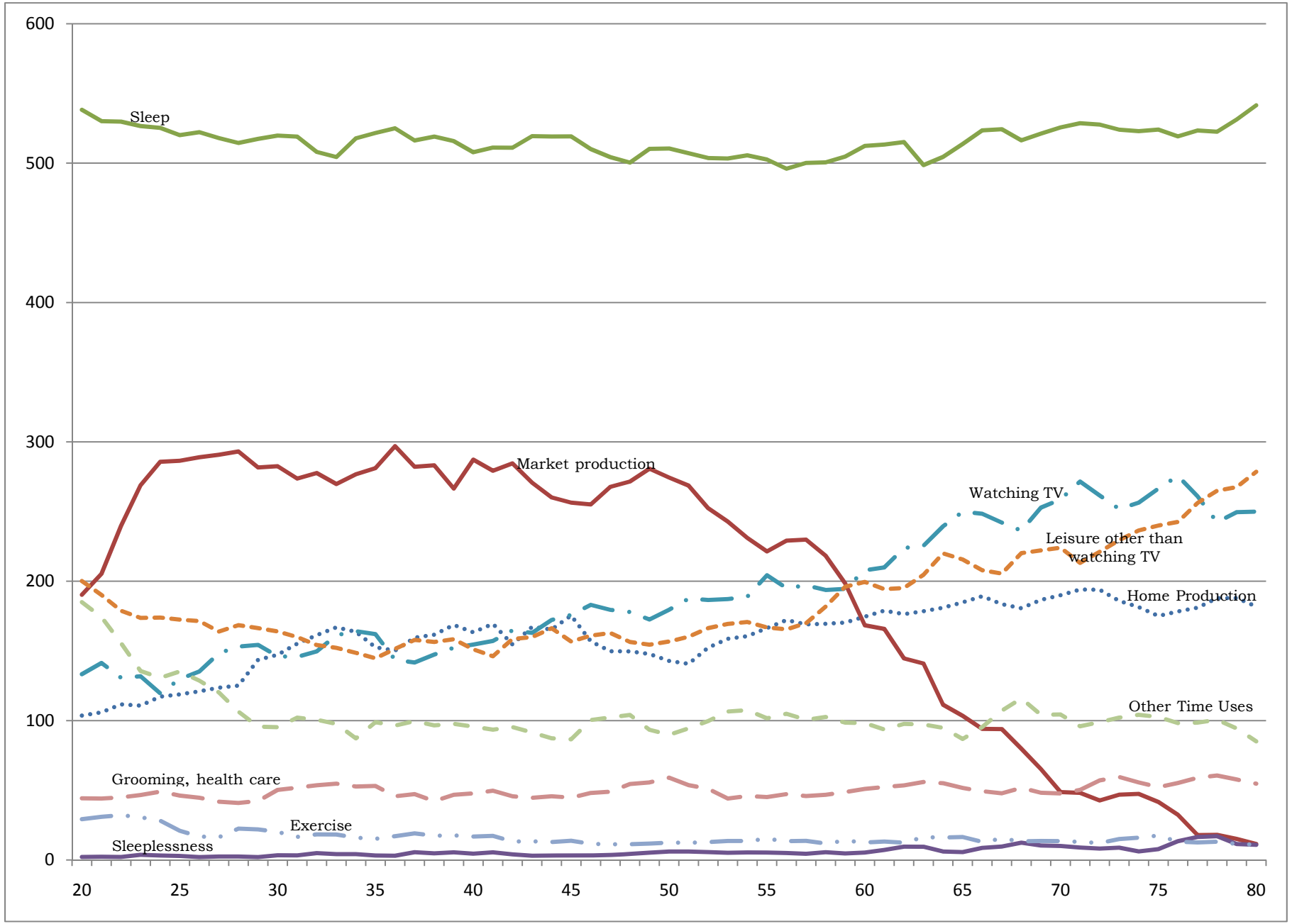
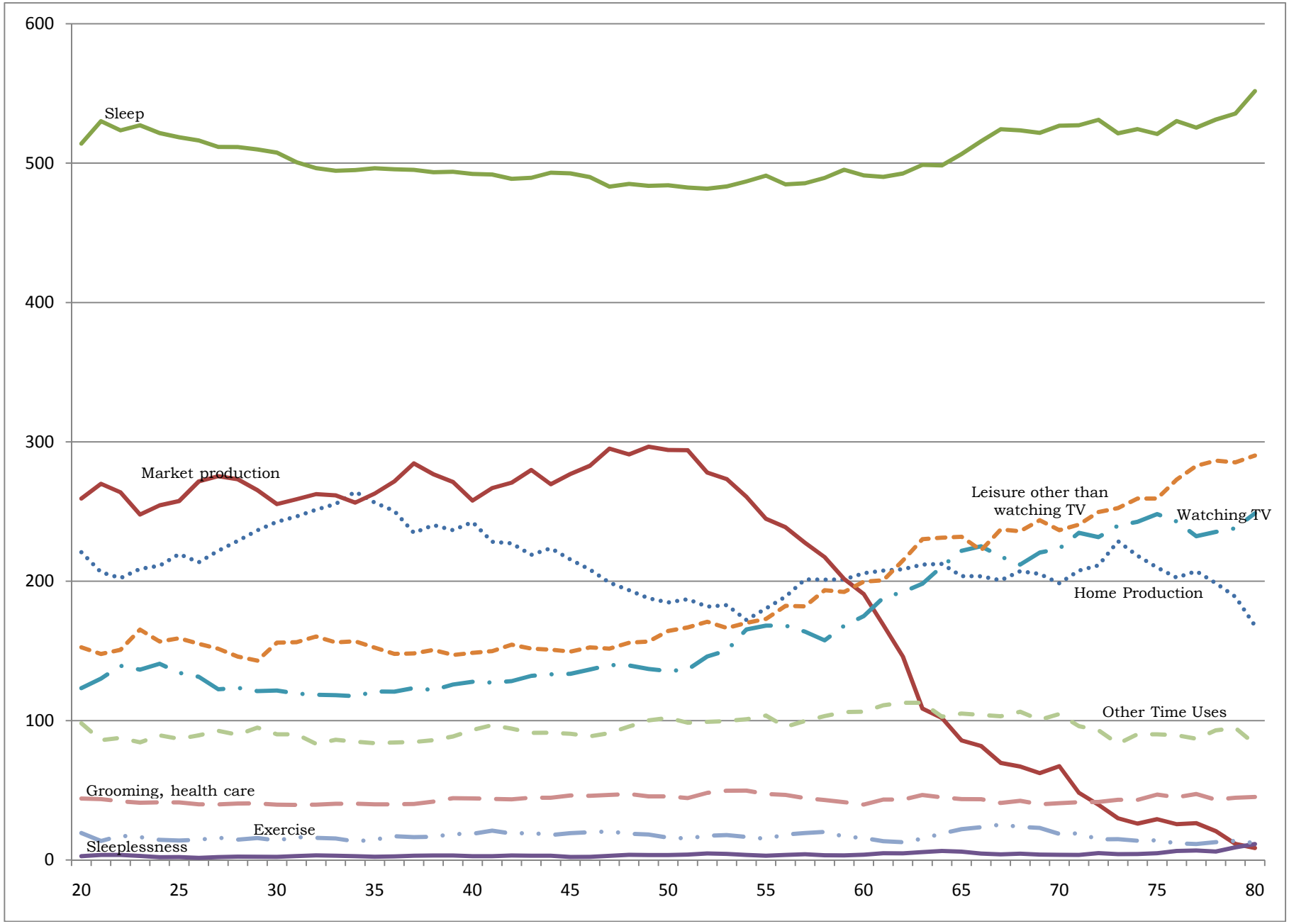
Figure 1a: Minutes per day spent with various activities by age, using ATUS data - Singles over 20 years old



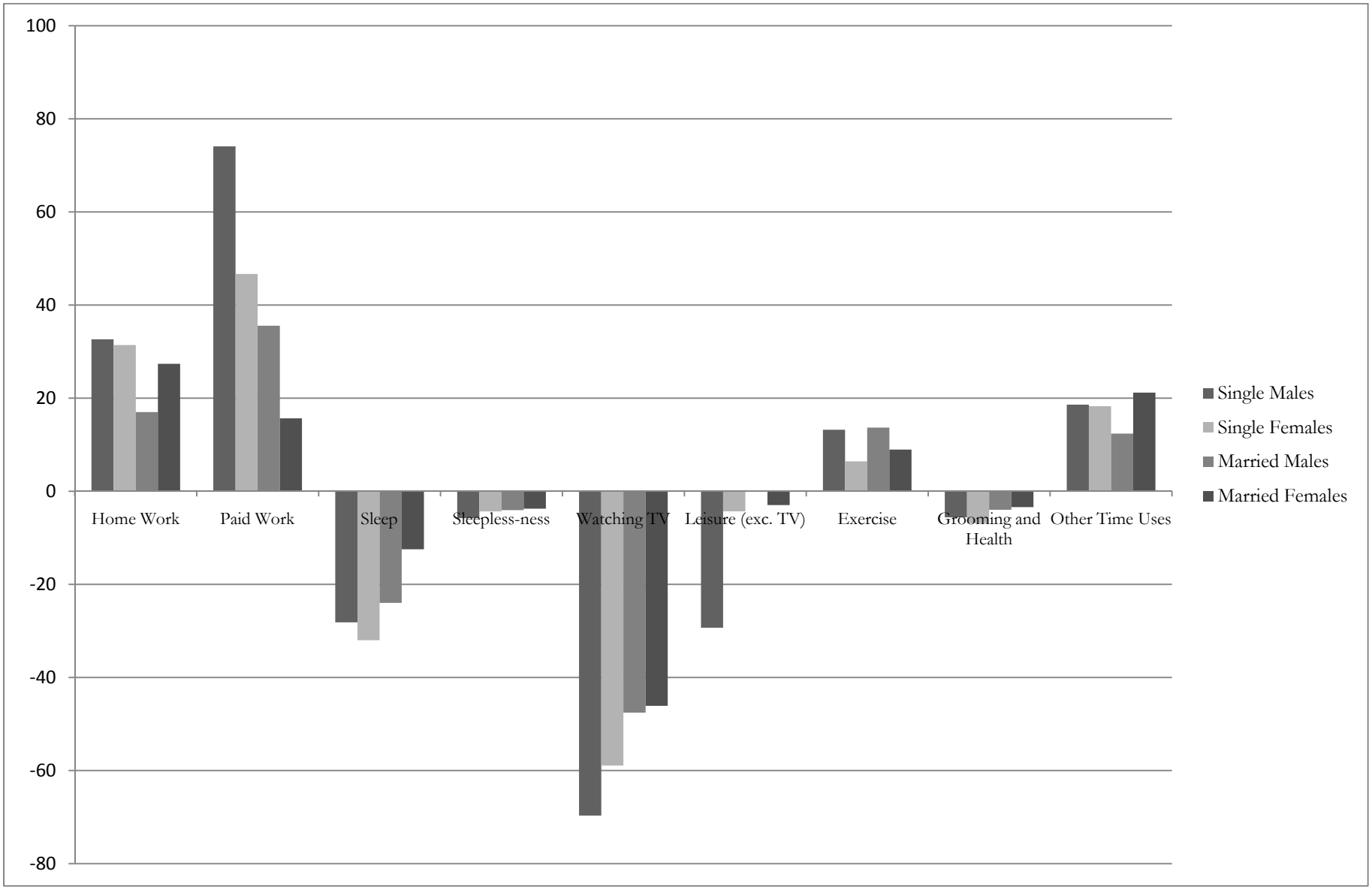
3-period moving averages of means at each age.

Figure 1b: Minutes per day spent with various activities by age, using ATUS data - Couples over 20 years old



3-period moving averages of means at each age.

Figure 2: Regression coefficient for good health minus regression coefficient for bad health. OLS



This figure was produced using Table 4.

Table 1: Description of time use variables in ATUS and HRS

	Both	ATUS only	HRS only
Home work	Meal preparation and cleanup House cleaning Laundry Shopping Home repair and maintenance Gardening Pet care Household management/bookkeeping Vehicle care	Child and adult care of household members Appliance care Sewing Related travel to all	
Paid work	Work at a paid job	Waiting, socializing, eating associated with working, Other Income-generating Activities, Job Search and Interviewing	
Sleep	Time spent sleeping		
Sleeplessness		Time spent not being able to sleep	
Leisure (Note: in ATUS we separate watching TV from other types of leisure)	Watching TV, Listening to music Playing cards, games, puzzles Using computer (for leisure: ATUS) Arts and crafts Reading Concerts, movies, lectures Singing, playing instrument	Eating and drinking Socializing and communicating Attending & hosting events Relaxing Hobbies Attending performances, movies, casinos	Leisure dining and eating out Phone, letters, emails Praying and meditating
Exercise	Sports and Exercise		
Grooming	Personal grooming other than sleep Health-related self care	Personal activities	
Other time uses	Helping non-family Volunteering Religious and spiritual time	Education Using professional services Using government services Travel time other than related to household production +all other time uses not included above	Visiting in person Showing affection Attending meetings
Unclassified time		Respondent refusal Respondent can't remember Unable to code	

Table 2: Summary statistics, 20 years and older, using ATUS data

		Single Males	Single Females	Married Males	Married Females
Time Uses (Minutes per 24 hours)	Home Work	115.40	183.83	159.00	270.57
	Market Work	247.55	179.91	278.34	178.08
	Sleep	518.27	518.24	494.68	503.86
	Sleeplessness	4.39	6.02	2.87	4.22
	Watching TV	193.35	172.18	170.95	133.78
	Leisure (other than TV)	185.43	185.13	174.52	176.42
	Exercise	25.17	11.30	21.49	12.80
	Grooming	39.41	56.94	36.65	50.26
	Other time*	99.91	114.64	90.94	97.61
Demographic Variables	Age	41.50	49.92	48.87	46.94
	Good Health	0.51	0.44	0.54	0.56
	Bad Health	0.18	0.23	0.16	0.14
	White	0.78	0.75	0.87	0.87
	Black	0.16	0.21	0.08	0.07
	Other race†	0.05	0.04	0.05	0.06
	Hispanic	0.15	0.12	0.13	0.13
	Less than HS	0.18	0.17	0.15	0.13
	HS graduate	0.30	0.29	0.28	0.29
	Any college	0.45	0.46	0.43	0.48
	Grad degree	0.07	0.07	0.13	0.11
	Any Children	0.14	0.27	0.46	0.46

**Does not include unclassified time (respondent refused, respondent can't remember, or unable to code)*
† Individual belonging to a race other than black or white

Table 3: Summary statistics using HRS data

		Single Males	Single Females	Married Males	Married Females
Time Uses (Hours per week)	Home Work	27.86	27.97	27.83	34.57
	Market Work	10.86	8.71	14.58	11.52
	Sleep	46.25	45.03	48.91	47.74
	Leisure	61.39	69.70	62.61	70.01
	Exercise	8.82	7.13	9.37	7.46
	Grooming	10.68	13.28	11.04	12.47
	Other time	19.64	24.71	21.64	28.17
Spending on services (annual)	Household services	2231.10	1661.02	3061.05	3069.90
	Yard services	212.47	345.05	380.20	425.24
	Eating out	1658.51	938.98	2268.26	2242.37
Demographic Variables	Age	68.80	70.98	67.37	64.23
	Good Health	0.39	0.37	0.46	0.50
	Bad Health	0.29	0.31	0.22	0.21
	white	0.81	0.79	0.89	0.89
	black	0.16	0.17	0.08	0.08
	other race	0.03	0.04	0.03	0.04
	hispanic	0.07	0.07	0.07	0.07
	Less than HS	0.19	0.22	0.17	0.14
	HS graduate	0.34	0.35	0.29	0.38
	Any college	0.30	0.29	0.34	0.34
	Grad degree	0.10	0.08	0.16	0.11
	Any Children	0.80	0.89	0.97	0.97

**Time use variables are hours per week in all HRS data.*
† Individual belonging to a race other than black or white

Table 4. Estimates of the effect of health status on various time use categories using ATUS data

Dependent variable: **Minutes spent with activity per 24 hours**		Home Work	Paid Work	Sleep	Sleepless-ness	Watching TV	Leisure (exc. TV)	Exercise	Grooming and Health	Other Time Uses
Single Males, N=5417	Good health	**7.78** *(1.14)*	**3.82** *(0.44)*	**-9.08** *(-1.58)*	**0.18** *(0.19)*	**-18.46**** *(-2.41)*	**-4.57** *(-0.70)*	**9.28**** *(2.91)*	**4.41*** *(1.79)*	**7.38** *(1.50)*
	Bad health	**-24.87**** *(-3.14)*	**-70.28***** *(-8.47)*	**19.08**** *(2.57)*	**5.98***** *(3.49)*	**51.23***** *(4.90)*	**24.76**** *(2.78)*	**-3.92** *(-1.17)*	**10.02**** *(2.93)*	**-11.23*** *(-1.94)*
Test of good health – bad health		0.000	0.000	0.000	0.002	0.000	0.001	0.000	0.145	0.002
Single Females, N=9203	Good health	**7.78** *(1.50)*	**6.27** *(1.11)*	**-3.92** *(-1.01)*	**-0.30** *(-0.46)*	**-20.07***** *(-4.16)*	**-2.40** *(-0.52)*	**3.93**** *(3.07)*	**3.49**** *(2.12)*	**4.82** *(1.22)*
	Bad health	**-23.63***** *(-3.79)*	**-40.40***** *(-7.09)*	**28.08***** *(5.10)*	**4.03***** *(4.05)*	**38.86***** *(5.80)*	**1.92** *(0.33)*	**-2.49**** *(-2.04)*	**10.36**** *(3.14)*	**-13.45**** *(-3.05)*
Test of good health – bad health		0.000	0.000	0.000	0.000	0.000	0.451	0.000	0.047	0.000
Married Males, N=9083	Good health	**3.73** *(0.68)*	**14.03**** *(2.11)*	**-7.06*** *(-1.92)*	**-0.68** *(-1.22)*	**-26.78***** *(-5.69)*	**-3.47** *(-0.79)*	**6.61**** *(2.74)*	**1.53** *(1.39)*	**9.84**** *(2.59)*
	Bad health	**-13.27*** *(-1.72)*	**-21.54**** *(-2.32)*	**16.91**** *(2.64)*	**3.38**** *(2.68)*	**20.80**** *(2.49)*	**-3.49** *(-0.50)*	**-7.05**** *(-2.70)*	**5.52**** *(2.29)*	**-2.55** *(-0.46)*
Test of good health – bad health		0.025	0.000	0.000	0.001	0.000	0.997	0.000	0.103	0.024
Married Females, N=10168	Good health	**16.27**** *(2.80)*	**-6.39** *(-1.23)*	**-0.16** *(-0.05)*	**-2.23***** *(-3.55)*	**-21.74***** *(-5.79)*	**4.29** *(1.04)*	**5.48***** *(3.77)*	**0.22** *(0.14)*	**3.37** *(0.94)*
	Bad health	**-11.10** *(-1.41)*	**-22.05**** *(-3.26)*	**12.30**** *(2.12)*	**1.53** *(1.51)*	**24.36***** *(3.85)*	**7.26** *(1.10)*	**-3.47**** *(-2.07)*	**3.62** *(1.14)*	**-17.82***** *(-3.90)*
Test of good health – bad health		0.000	0.017	0.028	0.000	0.000	0.643	0.000	0.271	0.000

Notes: OLS regressions. Good health refers to self-reported excellent or very good health. Bad health refers to self-reported fair or poor health. We omit the middle health category (self-reported health=good). T-statistics are shown in parentheses. Significance levels shown are 1% (***), 5% (**) and 10% (*). The time use categories shown add up to 24 hours less uncategorized/unreported time (respondent refused, can't remember, or unable to code). A full set of age dummies is also included in the regressions, in addition to controlling for race, education, the presence of children, day, year, and spousal characteristics if applicable. The full regressions are available on request.

Table 5. Estimates of the effect of health status on various time use categories using ATUS data - Singles
Intensive and extensive margins reported

Dependent variable: **Minutes spent with activity per 24 hours**			Home Work	Paid Work	Sleep	Sleepless-ness	Watching TV	Leisure (exc. TV)	Exercise	Grooming and Health	Other Time Uses
Single Males N=5417	**goodhealth**	tobit	**7.22** *(0.93)*	**6.65** *(0.31)*	**-9.09** *(-1.59)*	**-22.27** *(-1.27)*	**-20.31**** *(-2.26)*	**-3.92** *(-0.59)*	**54.57***** *(3.87)*	**6.57*** *(1.88)*	**9.52** *(1.62)*
		probit	**-0.02** *(-0.27)*	**0.03** *(0.56)*	**0.1** *(0.30)*	**-0.13** *(-1.53)*	**-0.03** *(-0.43)*	**0.08** *(0.75)*	**0.24***** *(4.12)*	**0.07** *(1.32)*	**0.08** *(1.26)*
	badhealth	tobit	**-29.05**** *(-3.18)*	**-281.52***** *(-9.36)*	**19.09**** *(2.58)*	**76.35***** *(3.76)*	**55.69***** *(4.76)*	**25.26**** *(2.81)*	**-24.43** *(-1.34)*	**10.06**** *(2.18)*	**-23.46**** *(-3.14)*
		probit	**-0.1** *(-1.42)*	**-0.60***** *(-8.94)*	**0.27** *(0.56)*	**0.35***** *(3.66)*	**0.12** *(1.57)*	**0.08** *(0.53)*	**-0.09** *(-1.17)*	**-0.04** *(-0.64)*	**-0.35***** *(-5.17)*
	Test of good health – bad health	tobit	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.484	0.000
		probit	0.215	0.000	0.681	0.000	0.047	0.969	0.000	0.075	0.000
Single Females N=9203	**goodhealth**	tobit	**8.78** *(1.60)*	**21.43** *(1.17)*	**-3.96** *(-1.02)*	**-8.06** *(-0.72)*	**-23.82***** *(-3.96)*	**-2.44** *(-0.52)*	**40.29***** *(5.29)*	**3.88*** *(1.84)*	**6.01** *(1.31)*
		probit	**0.08** *(1.54)*	**0.05** *(1.28)*	**-0.65*** *(-1.92)*	**-0.05** *(-0.79)*	**-0.06** *(-1.39)*	**-0.02** *(-0.23)*	**0.29***** *(6.01)*	**0.01** *(0.16)*	**0.06** *(1.22)*
	badhealth	tobit	**-26.41***** *(-3.93)*	**-205.63***** *(-8.06)*	**27.92***** *(5.07)*	**45.78***** *(3.95)*	**40.36***** *(5.18)*	**1.73** *(0.30)*	**-24.04**** *(-2.45)*	**9.87**** *(2.65)*	**-24.38***** *(-4.42)*
		probit	**-0.16**** *(-2.60)*	**-0.42***** *(-7.93)*	**-1.16**** *(-3.05)*	**0.22***** *(3.63)*	**0.02** *(0.46)*	**-0.07** *(-0.60)*	**-0.14**** *(-2.28)*	**-0.08*** *(-1.66)*	**-0.33***** *(-6.86)*
	Test of good health – bad health	tobit	0.000	0.000	0.000	0.000	0.000	0.468	0.000	0.121	0.000
		probit	0.000	0.000	0.065	0.000	0.096	0.673	0.000	0.069	0.000

Notes: Tobit and Probit regressions. For probit, marginal effects are reported. Good health refers to self-reported excellent or very good health. Bad health refers to self-reported fair or poor health. We omit the middle health category (self-reported health=good). T-statistics are shown in parentheses. Significance levels shown are 1% (***), 5% (**) and 10% (*). The time use categories shown add up to 24 hours less uncategorized/unreported time (respondent refused, can't remember, or unable to code). The regressions control for age, race, education, the presence of children, day, and year. The full regressions are available on request.

Table 6. Estimates of the effect of health status on various time use categories using ATUS data – "Couples"
Intensive and extensive margins reported

Dependent variable: **Minutes spent with activity per 24 hours**			Home Work	Paid Work	Sleep	Sleepless-ness	Watching TV	Leisure (exc. TV)	Exercise	Grooming and Health	Other Time Uses
Married Males N=9083		tobit	**4.15** *(0.68)*	**33.96**** *(2.35)*	**-7.07*** *(-1.93)*	**-16.02** *(-1.32)*	**-31.70***** *(-5.70)*	**-3.77** *(-0.86)*	**38.05***** *(3.85)*	**1.91** *(1.23)*	**12.11**** *(2.65)*
		probit	**0.02** *(0.46)*	**0.08**** *(2.23)*	**-0.54** *(-1.33)*	**-0.08** *(-1.15)*	**-0.13**** *(-3.03)*	**-0.20*** *(-1.88)*	**0.18***** *(4.27)*	**0.02** *(0.48)*	**0.07** *(1.58)*
	goodhealth										
		tobit	**-18.32**** *(-2.04)*	**-75.20**** *(-3.13)*	**16.82**** *(2.63)*	**51.75**** *(3.28)*	**20.64**** *(2.23)*	**-3.95** *(-0.57)*	**-34.16**** *(-2.31)*	**5.27*** *(1.76)*	**-9.73** *(-1.38)*
		probit	**-0.14**** *(-2.17)*	**-0.20***** *(-3.42)*	**-1.14**** *(-2.54)*	**0.27**** *(3.23)*	**-0.01** *(-0.16)*	**-0.28*** *(-1.65)*	**-0.11** *(-1.60)*	**-0.04** *(-0.76)*	**-0.20***** *(-3.35)*
	badhealth										
	Test of good health – bad health	tobit	0.011	0.000	0.000	0.000	0.000	0.979	0.000	0.262	0.002
		probit	0.010	0.000	0.061	0.000	0.060	0.641	0.000	0.258	0.000
Married Females N=10168		tobit	**17.10**** *(2.86)*	**-16.62***** *(-3.68)*	**-0.17** *(-0.05)*	**-43.10***** *(-4.68)*	**-27.46***** *(-6.02)*	**4.15** *(1.00)*	**41.74***** *(5.20)*	**0.74** *(0.38)*	**5.39** *(1.25)*
		probit	**0.12** *(1.59)*	**-0.03** *(-0.69)*	**-4.97** *(-0.02)*	**-0.28***** *(-4.57)*	**-0.16***** *(-3.85)*	**-0.08** *(-0.67)*	**0.25***** *(5.71)*	**0.05** *(1.15)*	**0.08*** *(1.77)*
	goodhealth										
		tobit	**-13.56** *(-1.63)*	**-93.05***** *(-23.57)*	**12.27**** *(2.12)*	**10.31** *(0.90)*	**25.94***** *(3.62)*	**6.79** *(1.02)*	**-28.38**** *(-2.24)*	**2.92** *(0.79)*	**-23.69***** *(-3.95)*
		probit	**-0.18**** *(-2.14)*	**-0.21***** *(-3.68)*	**-6.04** *(-0.03)*	**0.05** *(0.64)*	**0.06** *(0.96)*	**-0.28*** *(-1.90)*	**-0.15**** *(-2.09)*	**-0.07** *(-1.26)*	**-0.16**** *(-2.76)*
	badhealth										
	Test of good health – bad health	tobit	0.000	0.000	0.028	0.000	0.000	0.683	0.000	0.540	0.000
		probit	0.001	0.001	0.001	0.000	0.000	0.142	0.000	0.030	0.000

Notes: Tobit and dProbit regressions. Good health refers to self-reported excellent or very good health. Bad health refers to self-reported fair or poor health. We omit the middle health category (self-reported health=good). T-statistics are shown in parentheses. Significance levels shown are 1% (***), 5% (**) and 10% (*). The time use categories shown add up to 24 hours less uncategorized/unreported time (respondent refused, can't remember, or unable to code). The regressions control for age, race, education, the presence of children, day, year, and spousal characteristics. The full regressions are available on request.

Table 7: Breakdown of unpaid time uses in the ATUS - Singles

	Single Males, N=5417	goodhealth		badhealth		good health - bad health	significance
Top 5 activities	Exterior maintenance, repair, and decoration	**-2.82**	*(-0.084)*	**-123.591****	*(-2.724)*	**120.77**	0.00
	Interior maintenance, repair, and decoration	**30.31**	*(0.795)*	**-36.74**	*(-0.710)*	**67.05**	0.20
	Lawn and garden care	**23.70**	*(1.281)*	**-39.563***	*(-1.704)*	**63.26**	0.00
	Purchasing personal care services	**1.74**	*(0.099)*	**-58.792****	*(-1.993)*	**60.53**	0.04
	Purchasing vehicle maintenance and repair services	**-6.56**	*(-0.279)*	**-52.67**	*(-1.607)*	**46.11**	0.14
	Vehicle maintenance by respondent	**4.92**	*(0.205)*	**-29.59**	*(-1.006)*	**34.50**	0.22
	Caring for and helping non-household adults	**1.35**	*(0.129)*	**-23.333***	*(-1.662)*	**24.68**	0.07
	Time spent with appliances, tools, and toys	**-68.950****	*(-2.366)*	**-90.260****	*(-2.254)*	**21.31**	0.58
	Consumer goods purchases	**5.56**	*(1.412)*	**-11.301****	*(-2.356)*	**16.86**	0.00
	Household management	**-9.08**	*(-1.262)*	**-25.437****	*(-2.856)*	**16.36**	0.07
	Caring for non-household children*	**23.965***	*(1.834)*	**10.05**	*(0.588)*	**13.92**	0.39
	Caring for household children*	**18.66**	*(1.367)*	**6.48**	*(0.362)*	**12.17**	0.47
	Travel related to purchasing goods and services	**3.81**	*(1.360)*	**-6.374***	*(-1.781)*	**10.19**	0.00
	Time spent with animals and pets	**-1.57**	*(-0.261)*	**-7.96**	*(-1.068)*	**6.39**	0.36
	Purchasing household services	**-6.07**	*(-0.348)*	**-11.40**	*(-0.542)*	**5.33**	0.78
	Travel related to household activities	**-1.61**	*(-0.384)*	**-4.86**	*(-0.925)*	**3.25**	0.51
	Grocery shopping	**1.92**	*(0.434)*	**-0.67**	*(-0.123)*	**2.58**	0.62
	Housework	**-8.61**	*(-1.047)*	**-8.49**	*(-0.835)*	**-0.12**	0.99
	Food preparation and cleanup	**0.88**	*(0.255)*	**3.00**	*(0.735)*	**-2.12**	0.57

	Single Females, N=9203	goodhealth		badhealth		good health - bad health	significance
Top 5 activities	Lawn and garden care	**10.05**	*(0.901)*	**-61.806*****	*(-4.609)*	**71.85**	0.00
	Purchasing personal care services	**27.968***	*(1.754)*	**-31.64**	*(-1.498)*	**59.60**	0.00
	Exterior maintenance, repair, and decoration	**-7.51**	*(-0.324)*	**-59.708***	*(-1.902)*	**52.20**	0.09
	Vehicle maintenance by respondent	**5.27**	*(0.265)*	**-42.80**	*(-1.390)*	**48.07**	0.08
	Interior maintenance, repair, and decoration	**27.36**	*(1.089)*	**-3.18**	*(-0.114)*	**30.54**	0.28
	Consumer goods purchases	**5.56**	*(1.535)*	**-24.320*****	*(-5.373)*	**29.88**	0.00
	Caring for and helping non-household adults	**5.70**	*(0.728)*	**-21.819****	*(-2.238)*	**27.52**	0.01
	Purchasing vehicle maintenance and repair services	**10.40**	*(0.706)*	**-14.75**	*(-0.733)*	**25.16**	0.21
	Housework	**7.22**	*(1.383)*	**-14.398****	*(-2.286)*	**21.62**	0.00
	Purchasing household services	**11.16**	*(1.097)*	**-10.05**	*(-0.695)*	**21.21**	0.12
	Household management	**8.157***	*(1.747)*	**-8.13**	*(-1.398)*	**16.28**	0.01
	Grocery shopping	**7.439****	*(2.165)*	**-8.302****	*(-1.982)*	**15.74**	0.00
	Travel related to purchasing goods and services	**4.157****	*(2.135)*	**-11.324*****	*(-4.495)*	**15.48**	0.00
	Travel related to household activities	**0.94**	*(0.305)*	**-7.545****	*(-1.964)*	**8.49**	0.03
	Time spent with animals and pets	**0.83**	*(0.258)*	**-0.64**	*(-0.158)*	**1.48**	0.72
	Time spent with appliances, tools, and toys	**-18.77**	*(-1.195)*	**-17.14**	*(-0.767)*	**-1.63**	0.94
	Food preparation and cleanup	**-1.32**	*(-0.537)*	**0.49**	*(0.167)*	**-1.81**	0.53
	Caring for non-household children*	**-4.80**	*(-0.930)*	**-2.59**	*(-0.396)*	**-2.21**	0.73
	Caring for household children*	**-3.59**	*(-0.651)*	**-1.37**	*(-0.197)*	**-2.22**	0.75

Notes: Tobit regressions. Refer to table 6 notes.
**These regressions do not contain controls for children.*

Table 8: Breakdown of unpaid time uses in the ATUS – "Couples"

	Married Males, N=9083	goodhealth		badhealth		good health - bad health	significance
Top 5 activities	Purchasing personal care services	**-8.27**	*(-0.536)*	**-56.346****	*(-2.374)*	**48.08**	0.03
	Exterior maintenance, repair, and decoration	**31.00**	*(1.411)*	**-11.52**	*(-0.370)*	**42.53**	0.17
	Vehicle maintenance by respondent	**16.66**	*(1.203)*	**-9.21**	*(-0.461)*	**25.87**	0.18
	Caring for and helping non-household adults	**-3.75**	*(-0.345)*	**-25.51**	*(-1.314)*	**21.76**	0.26
	Time spent with appliances, tools, and toys	**6.14**	*(0.356)*	**-12.90**	*(-0.439)*	**19.04**	0.52
	Interior maintenance, repair, and decoration	**12.66**	*(0.546)*	**-4.38**	*(-0.116)*	**17.04**	0.63
	Household management	**6.31**	*(1.456)*	**-10.50**	*(-1.577)*	**16.81**	0.01
	Lawn and garden care	**-2.52**	*(-0.209)*	**-17.39**	*(-1.009)*	**14.86**	0.37
	Consumer goods purchases	**-1.72**	*(-0.526)*	**-11.040****	*(-2.194)*	**9.32**	0.06
	Travel related to purchasing goods and services	**0.54**	*(0.267)*	**-7.137****	*(-2.358)*	**7.68**	0.01
	Housework	**-9.80**	*(-1.592)*	**-15.29**	*(-1.608)*	**5.50**	0.55
	Caring for household children*	**5.91**	*(1.378)*	**1.58**	*(0.222)*	**4.32**	0.53
	Caring for non-household children*	**5.69**	*(1.361)*	**1.44**	*(0.206)*	**4.26**	0.52
	Time spent with animals and pets	**-0.58**	*(-0.125)*	**-3.09**	*(-0.465)*	**2.51**	0.69
	Food preparation and cleanup	**-0.08**	*(-0.028)*	**-0.41**	*(-0.090)*	**0.33**	0.94
	Travel related to household activities	**-0.40**	*(-0.086)*	**-0.67**	*(-0.105)*	**0.26**	0.97
	Grocery shopping	**-2.79**	*(-0.674)*	**-2.68**	*(-0.435)*	**-0.11**	0.99
	Purchasing household services	**-9.96**	*(-0.754)*	**-8.16**	*(-0.420)*	**-1.80**	0.92
	Purchasing vehicle maintenance and repair services	**-36.146****	*(-1.968)*	**-20.49**	*(-0.837)*	**-15.65**	0.53

	Married Females, N=10,168	goodhealth		badhealth		good health - bad health	significance
Top 5 activities	Lawn and garden care	**30.680****	*(2.636)*	**-52.496****	*(-3.015)*	**83.18**	0.00
	Exterior maintenance, repair, and decoration	**30.61**	*(1.312)*	**-18.10**	*(-0.526)*	**48.71**	0.14
	Interior maintenance, repair, and decoration	**-9.39**	*(-0.414)*	**-49.78**	*(-1.345)*	**40.39**	0.27
	Purchasing vehicle maintenance and repair services	**-11.02**	*(-1.003)*	**-43.729****	*(-2.281)*	**32.71**	0.06
	Purchasing personal care services	**20.84**	*(1.326)*	**-8.91**	*(-0.381)*	**29.75**	0.17
	Purchasing household services	**-1.68**	*(-0.213)*	**-26.17**	*(-1.625)*	**24.49**	0.12
	Vehicle maintenance by respondent	**-26.572***	*(-1.788)*	**-44.318****	*(-2.285)*	**17.75**	0.32
	Consumer goods purchases	**4.89**	*(1.495)*	**-12.118****	*(-2.328)*	**17.01**	0.00
	Travel related to household activities	**2.94**	*(0.848)*	**-11.065****	*(-2.136)*	**14.00**	0.01
	Grocery shopping	**5.25**	*(1.610)*	**-7.66**	*(-1.471)*	**12.91**	0.01
	Caring for non-household children*	**5.63**	*(1.520)*	**-6.89**	*(-1.146)*	**12.52**	0.03
	Travel related to purchasing goods and services	**2.28**	*(0.836)*	**-8.697****	*(-2.562)*	**10.97**	0.00
	Household management	**1.24**	*(0.365)*	**-9.25**	*(-1.612)*	**10.49**	0.06
	Caring for household children*	**5.58**	*(1.419)*	**-3.96**	*(-0.625)*	**9.54**	0.12
	Time spent with animals and pets	**3.61**	*(0.981)*	**-3.17**	*(-0.537)*	**6.79**	0.24
	Housework	**5.40**	*(1.173)*	**4.09**	*(0.592)*	**1.30**	0.85
	Food preparation and cleanup	**4.064***	*(1.720)*	**5.24**	*(1.394)*	**-1.18**	0.74
	Caring for and helping non-household adults	**-2.54**	*(-0.325)*	**2.15**	*(0.188)*	**-4.69**	0.68
	Time spent with appliances, tools, and toys	**-8.91**	*(-0.486)*	**7.94**	*(0.258)*	**-16.84**	0.57

Notes: Tobit regressions. Refer to table 6 notes.
**These regressions do not contain controls for children.*

Table 9: Estimates of the effect of health status on various time use categories using HRS data

Dependent variable: **Hours spent with activity per week**		Home Work	Paid Work	Sleep	Leisure	Exercise	Grooming and Health	Other Time Uses	Annual household services spending	Annual yard services spending	Annual spending on eating out
Single Males	goodhealth	**-0.06** *(-0.09)*	**1.02**** *(3.09)*	**0.46** *(1.07)*	**0.3** *(0.28)*	**1.25***** *(5.53)*	**-1.96***** *(-10.12)*	**1.09*** *(1.67)*	**-67.4** *(-1.05)*	**16.26**** *(2.61)*	**29.6** *(0.52)*
	badhealth	**-2.42***** *(-3.66)*	**-1.14***** *(-3.81)*	**0.69** *(1.30)*	**5.05***** *(4.17)*	**-2.16***** *(-10.29)*	**1.92***** *(8.08)*	**-1.02** *(-1.40)*	**-309.55***** *(-4.98)*	**-8.59** *(-1.25)*	**-183.74**** *(-3.24)*
	NT	1208	1268	1275	922	1253	1229	1224	931	975	970
Single Females	goodhealth	**-0.01** *(-0.04)*	**0.79***** *(5.97)*	**-0.09** *(-0.50)*	**-1.82**** *(-2.97)*	**0.85***** *(7.59)*	**-1.44***** *(-10.78)*	**4.09***** *(12.38)*	**275.47***** *(12.52)*	**49.07***** *(6.23)*	**225.99***** *(15.41)*
	badhealth	**-3.61***** *(-10.51)*	**-1.45***** *(-12.59)*	**-0.77**** *(-3.27)*	**-2.94***** *(-5.41)*	**-0.53***** *(-4.57)*	**4.00***** *(20.89)*	**-4.69***** *(-14.47)*	**-259.94***** *(-12.36)*	**-19.68**** *(-3.12)*	**-162.98***** *(-14.25)*
	NT	4189	4491	4473	3073	4329	4270	4151	3210	3381	3364
Married Males	goodhealth	**0.27** *(1.04)*	**1.20***** *(8.46)*	**-1.12***** *(-8.80)*	**dropped** .	**1.04***** *(8.29)*	**-2.10***** *(-24.07)*	**1.38***** *(5.36)*	**309.21***** *(7.23)*	**47.51***** *(5.15)*	**174.60***** *(4.63)*
	badhealth	**-2.30***** *(-7.36)*	**-1.49***** *(-10.62)*	**-0.04** *(-0.22)*	**-2.40***** *(-4.87)*	**-1.33***** *(-9.01)*	**4.22***** *(31.96)*	**-2.82***** *(-9.66)*	**dropped** .	**92.97***** *(9.74)*	**dropped** .
	NT	4862	5027	5017	4014	4952	4940	4749	2329	2405	2416
Married Females	goodhealth	**0.22** *(0.80)*	**0.64***** *(6.07)*	**0.05** *(0.37)*	**3.18***** *(9.57)*	**1.31***** *(15.97)*	**-1.97***** *(-21.03)*	**-0.63*** *(-1.84)*	**696.40***** *(14.04)*	**97.88***** *(10.96)*	**549.57***** *(14.34)*
	badhealth	**-1.37***** *(-4.16)*	**-1.20***** *(-9.49)*	**-1.15***** *(-6.31)*	**dropped** .	**-0.78***** *(-7.34)*	**6.44***** *(38.49)*	**-4.09***** *(-12.02)*	**-187.43***** *(-3.44)*	**57.66***** *(5.31)*	**-179.27***** *(-4.47)*
	NT	5226	5445	5425	4181	5335	5330	5093	2663	2760	2741

Notes: Feasible generalized least squares regressions. Good health refers to self-reported excellent or very good health. Bad health refers to self-reported fair or poor health. We omit the middle health category (self-reported health=good). Significance levels shown are 1% (***), 5% (**) and 10% (*). A full set of age dummies is also included in the regressions, in addition to race, education, the presence of children, and spousal characteristics. The time use variables in the HRS are hours per week. The categories shown DO NOT add up to 168 hours per week. The full regressions are available on request.